### **FEASIBILITY STUDY**

## **Grade Separation** SR 1435 and SR 1505 at US 74 **Scotland County**

R-3334

Prepared by Program Development Branch Division of Highways N. C. Department of Transportation

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# Grade Separation SR 1435 and SR 1505 at US 74 Scotland County R-3334

#### I. GENERAL DESCRIPTION

This feasibility study describes a proposed grade separation at US 74 that will connect SR 1435 and SR 1505 in Scotland County. The location of the proposed grade separation is shown on Figure 1.

The grade separation includes construction of a 28-foot (8.5-m) wide (clear deck width) structure over US 74 and widening SR 1505 to a 2-lane shoulder section with 12-foot (3.6-m) wide travel lanes and 8 feet (2.4 m) wide shoulders including 2 feet (0.6-m) paved. The required right-of-way width is 100 feet (30.5 m).

The estimated cost for right-of-way and construction is \$1,500,000 (\$1,400,000 for construction and \$100,000 for right-of-way).

There is an existing interchange at US 74 and SR 1436 which serves to route traffic to the same destination as the proposed grade separation. The proposed grade separation will however reduce this travel by approximately 1.8 miles (2.9 km).

This study is the initial step in the planning and design process for this project and is not to be considered the product of exhaustive environmental or design investigations. The purpose of this study is to describe the alternative treatments including costs, and identify potential problem areas that deserve consideration in the planning and design phases.

#### II. EXISTING CONDITIONS

The purpose of this project is to provide for the north/south movement of traffic in the area of the Laurinburg-Maxton Airport and the industrial park south of the airport. It was requested by the Laurinburg-Maxton Airport Commission and is supported by Scotland County.

SR 1435 is a 2-lane, 24-foot (7.3 m) wide roadway, with soil shoulders. It serves the industrial park south of the Laurinburg-Maxton Airport and areas east of the airport. It currently dead ends at and north of US 74.

SR 1505 is a 0.15 mile (0.25 km) long, 2-lane, 20-foot (6.1-m) wide roadway, with soil shoulders. It dead ends at and south of US 74 and forms a T intersection with SR 1369 which serves areas south of US 74 and west of the airport.

If the proposed project is constructed, it is estimated that it will have a traffic volume of approximately 1,300 vehicles per day in the design year (2020) and will be operating at a Level of Service B.

#### III. DETAILED DESCRIPTION

The proposed project is the construction of a grade separation at US 74 that will connect SR 1435 and SR 1505 in Scotland County. The location of the grade separation is shown on Figure 1.

The grade separation includes construction of a 28-foot (8.5-m) wide (clear deck width) structure over US 74 and widening SR 1505 to a 2-lane shoulder section with 12-foot (3.6-m) wide travel lanes and 8 feet (2.4 m) wide shoulders including 2 feet (0.6-m) paved. The required right-of-way width is 100 feet (30.5 m).

It is anticipated that no residences or businesses will be relocated as a result of this project.

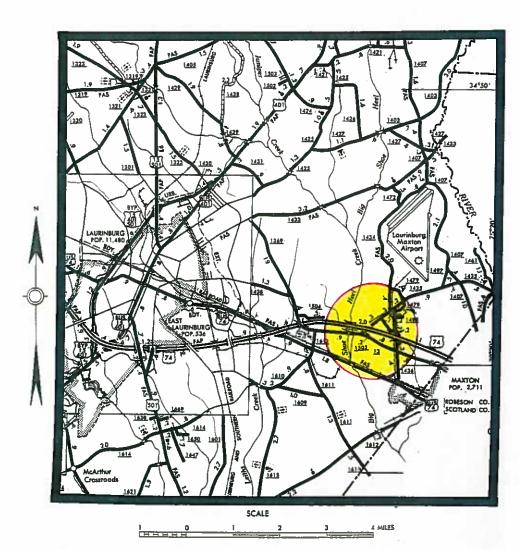
The estimated cost for the proposed improvements, including right-of-way and construction, is \$1,500,000 as follows:

Right-of-Way ....... \$ 100,000 Construction ...... \$1,400,000

Total Cost ........ \$1,500,000

#### IV. OTHER COMMENTS

No wetlands or historic properties are anticipated on this project; however, an environmental screening was not conducted.





#### FEASIBILITY STUDIES UNIT

R-3334

Grade Separation

SR 1435 and SR 1505 at US 74

Scotland County

DIVISION 8

FIGURE 1

